

**Pending Claims:**

1. (Previously Presented) A method of improving connectivity among topology subnets using a common connection network, comprising:

determining, by a border node located at a border of a particular one of the topology subnets, one or more links between the border node and a neighboring border node located at the border of a different one of the topology subnets, wherein a first session endpoint resides in the particular one of the topology subnets and has connectivity to a global virtual routing node ("GVRN");

creating a list of the determined links;

determining that the first session endpoint has connectivity to the GVRN and adding link information to the created list to represent the determined connectivity of the first session endpoint to the GVRN; and

forwarding the list to the neighboring border node.

2. (Previously Presented) The method according to Claim 1, further comprising:

receiving, at the neighboring border node, the list;

determining whether a second session endpoint, which resides in the different one of the topology subnets, has connectivity to the GVRN or to another GVRN, and, when the second session endpoint has connectivity to the GVRN or to another GVRN, adding link information to the list to represent the determined connectivity; and

using the list to select a data transmission path between the first session endpoint and the second session endpoint.

3. (Previously Presented) The method according to Claim 2, wherein using the list to select a data transmission path further comprises checking to see if both the first session endpoint and the second session endpoint have connectivity to a common GVRN, and, when both the first session endpoint and the second session endpoint have connectivity to a single GVRN, determining whether selecting the common GVRN as a node in the data transmission path results in an optimal data transmission path.

4. (Original) A global virtual routing node ( $\circ$ GVRN $\circ$ ) for interconnecting multiple topology subnets using a common connection network which extends beyond each of the topology subnets, comprising:

connections which are defined from one or more nodes in the topology subnets to the GVRN;

means for representing the connections as links between physical nodes in the topology subnets; and

means for selectively analyzing the represented connections along with the links between physical nodes when selecting a data transmission path through the multiple topology subnets, wherein the data transmission path spans the common connection network if the connections to the GVRN are selected.

5. (Previously Presented) A system for improving connectivity among topology subnets using a common connection network, comprising:

means for determining, by a border node located at a border of a particular one of the topology subnets, one or more links between the border node and a neighboring border node located at the border of a different one of the topology subnets, wherein a first session endpoint resides in the particular one of the topology subnets and has connectivity to a global virtual routing node ("GVRN");

means for creating a list of the determined links;

means for determining that the first session endpoint has connectivity to the GVRN and adding link information to the list to represent the determined connectivity of the first session endpoint to the GVRN; and

means for forwarding the list to the neighboring border node.

6. (Previously Presented) The system according to Claim 5, further comprising:

means for receiving, at the neighboring border node, the list;

means for determining whether a second session endpoint, which resides in the different one of the topology subnets, has connectivity to the GVRN or to another GVRN, and, when the second session endpoint has connectivity to the GVRN or to another GVRN, adding link information to the list to represent the determined connectivity; and

means for using the list to select a data transmission path between the first session

endpoint and the second session endpoint.

7. (Previously Presented) The system according to Claim 6, wherein the means for using the list to select a data transmission path further comprises means for checking to see if both the first session endpoint and the second session endpoint have connectivity to a common GVRN, and, when both the first session endpoint and the second session endpoint have connectivity to a single GVRN, determining whether selecting the common GVRN as a node in the data transmission path results in an optimal data transmission path.

8. (Previously Presented) A computer program product for improving connectivity among topology subnets using a common connection network, the computer program product embodied on one or more computer readable media and comprising:

computer readable program code that is configured to determine, by a border node located at a border of a particular one of the topology subnets, one or more links between the border node and a neighboring border node located at the border of a different one of the topology subnets, wherein a first session endpoint resides in the particular one of the topology subnets and has connectivity to a global virtual routing node ("GVRN");

computer readable program code that is configured to create a list of the determined links;

computer readable program code that is configured to determine that the first session endpoint has connectivity to the GVRN and to add link information to the list to represent the

determined connectivity of the first session endpoint to the GVRN; and

computer readable program code that is configured to forward the list to the neighboring border node.

9. (Previously Presented) The computer program product according to Claim 8, further comprising:

computer readable program code that is configured to receive, at the neighboring border node, the list;

computer readable program code that is configured to determine whether a second session endpoint, which resides in the different one of the topology subnets, has connectivity to the GVRN or to another GVRN, and, when the second session endpoint has connectivity to the GVRN or to another GVRN, to add link information to the list to represent the determined connectivity; and

computer readable program code that is configured to use the list to select a data transmission path between the first session endpoint and the second session endpoint.

10. (Previously Presented) The computer program product according to Claim 9, wherein the computer readable program code that is configured to use the list to select a data transmission path further comprises computer readable program code that is configured to check to see if both the first session endpoint and the second session endpoint have connectivity to a common GVRN, and, when both the first session endpoint and the second session endpoint have

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connectivity to a single GVRN, that is configured to determine whether selecting the common GVRN as a node in the data transmission path results in an optimal data transmission path.